PATENT
ATTORNEY DOCKET NO. 53529-5005-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

K. NOCKA *et al.*

Application No.: 10/005,907 — Group Art Unit: 1645

Filed: December 7, 2001 — Examiner: Unassigned

For: **NOVEL GENES ASSOCIATED WITH ALLERGIC HYPERSENSITIVITY AND MAST CELL ACTIVATION**

Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

PRELIMINARY AMENDMENT

IN THE CLAIMS:

Please amend the claims as follows without prejudice or disclaimer:

--23. (Amended) The isolated nucleic acid molecule of claim 1, wherein said nucleic acid molecule is operably linked to one or more expression control elements.

24. (Amended) A vector comprising an isolated nucleic acid molecule of claim 1.

25. (Amended) A host cell transformed to contain the nucleic acid molecule of claim 1.--

--28. (Amended) A method for producing a polypeptide comprising culturing a host cell transformed with the nucleic acid molecule of claim 1 under conditions in which the protein encoded by said nucleic acid molecule is expressed.--

--33. (Amended) An isolated antibody that binds to a polypeptide of claim 30.--

--35. (Amended) A method of identifying an agent which modulates the expression of a nucleic acid encoding a protein of claim 31, comprising:

exposing cells which express the nucleic acid to the agent; and

determining whether the agent modulates expression of said nucleic acid, thereby identifying an agent which modulates the expression of a nucleic acid encoding the protein.

36. (Amended) A method of identifying an agent which modulates at least one activity of a protein of claim 31, comprising:

exposing cells which express the protein to the agent;

determining whether the agent modulates at least one activity of said protein, thereby identifying an agent which modulates at least one activity of the protein.--

--38. (Amended) A method of identifying binding partners for a protein of claim 31, comprising:

exposing said protein to a potential binding partner; and

determining if the potential binding partner binds to said protein, thereby identifying binding partners for the protein.

39. (Amended) A method of modulating the expression of a nucleic acid encoding a protein of claim 31, comprising:

administering an effective amount of an agent which modulates the expression of a nucleic acid encoding the protein.

40. (Amended) A method of modulating at least one activity of a protein of claim 31, comprising:

administering an effective amount of an agent which modulates at least one activity of the protein.

41. (Amended) A non-human transgenic animal modified to contain the nucleic acid molecule of claim 1.--

--43. (Amended) A method of diagnosing a disease state in a subject, comprising determining the level of expression of a nucleic acid molecule of claim 1.--

--49. (Amended) A composition comprising an isolated nucleic acid molecule of claim 1 and an aqueous carrier.

50. (Amended) A method for the treatment or prevention of a disease state in a subject, comprising administering to said subject an effective amount of a nucleic acid molecule of claim 1 or an agonist or antagonist thereof, thereby effecting said treatment or prevention of a disease state in said subject.--

--58. (Amended) The computer system of claim 56, wherein the database further comprises sequence information for said at least one nucleic acid sequence.

59. (Amended) The computer system of claim 56, wherein the database further comprises information identifying the expression level for said at least one nucleic acid sequence in at least one normal mast cell.

60. (Amended) A computer system of claim 56, wherein the database further comprises information identifying the expression level of said at least one nucleic acid sequence in at least one mast cell from a patient with allergic hypersensitivity.--

--62. (Amended) A computer system of claim 56, further comprising records including descriptive information from an external database, which information correlates said genes to records in the external database.--

--66. (Amended) A method of claim 64, wherein the expression level of at least two nucleic acid sequences are compared.--

Please add the following new claims:

--70.(New) A method of diagnosing a disease state in a subject, comprising determining the level of expression of a protein of claim 31.

71.(New) A method for the treatment or prevention of a disease state in a subject, comprising administering to said subject an effective amount of a protein of claim 31 or an

agonist or antagonist thereof, thereby effecting said treatment or prevention of a disease state in said subject.--

REMARKS

The amendments to the claims *supra* have been made solely to remove multiple dependency from the claim set in order to reduce filing fees and do not represent any surrender of the subject matter of the claims as originally filed. Applicants reserve the right to present claims to the canceled subject matter in this or subsequent applications. Applicants further reserve the right to reintroduce multiple dependent claims in this application during prosecution. A marked-up copy of the amended claims showing the changes has been attached hereto as the "APPENDIX." New claims 70 and 71 have full support in claims 43 and 50, respectively, as originally filed. It is respectfully submitted that no prohibited new matter has been introduced by the amendments.

Except for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-0310. This paragraph is intended to be a constructive petition for extension of time in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,
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July 23, 2002

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APPENDIX
Marked-Up Copy of the Amended Claims
KEY: [~~deleted text~~]; new text

--23. The isolated nucleic acid molecule of [~~any one of claims 1-22~~] claim 1, wherein said nucleic acid molecule is operably linked to one or more expression control elements.

24. A vector comprising an isolated nucleic acid molecule of [~~any one of claims 1-22~~] claim 1.

25. A host cell transformed to contain the nucleic acid molecule of [~~any one of claims 1-22~~] claim 1.--

--28. (Amended) A method for producing a polypeptide comprising culturing a host cell transformed with the nucleic acid molecule of [~~any one of claims 1-22~~] claim 1 under conditions in which the protein encoded by said nucleic acid molecule is expressed.--

--33. (Amended) An isolated antibody that binds to a polypeptide of claim 30[~~, 31 or 32~~].--

--35. (Amended) A method of identifying an agent which modulates the expression of a nucleic acid encoding a protein of claim 31 [~~or 32~~], comprising:

exposing cells which express the nucleic acid to the agent; and

determining whether the agent modulates expression of said nucleic acid, thereby identifying an agent which modulates the expression of a nucleic acid encoding the protein.

36. (Amended) A method of identifying an agent which modulates at least one activity of a protein of claim 31[~~or 32~~], comprising:

exposing cells which express the protein to the agent;

determining whether the agent modulates at least one activity of said protein, thereby identifying an agent which modulates at least one activity of the protein.--

--38. (Amended) A method of identifying binding partners for a protein of claim 31[~~or 32~~], comprising:

exposing said protein to a potential binding partner; and

determining if the potential binding partner binds to said protein, thereby identifying binding partners for the protein.

39. (Amended) A method of modulating the expression of a nucleic acid encoding a protein of claim 31[~~or 32~~], comprising:

administering an effective amount of an agent which modulates the expression of a nucleic acid encoding the protein.

40. (Amended) A method of modulating at least one activity of a protein of claim 31[~~or 32~~], comprising:

administering an effective amount of an agent which modulates at least one activity of the protein.

41. (Amended) A non-human transgenic animal modified to contain the nucleic acid molecule of [~~any of claims 1-22~~] claim 1.--

--43. (Amended) A method of diagnosing a disease state in a subject, comprising determining the level of expression of a nucleic acid molecule [~~or protein of any one of claims 1-22, 31 or 32~~] of claim 1.--

--49. (Amended) A composition comprising an isolated nucleic acid molecule of claim 1 [~~or 2~~] and an aqueous carrier.

50. (Amended) A method for the treatment or prevention of a disease state in a subject, comprising administering to said subject an effective amount of a nucleic acid molecule [~~or protein of any one of claims 1-22, 31 or 32~~] of claim 1 or an agonist or antagonist thereof, thereby effecting said treatment or prevention of a disease state in said subject.--

--58. (Amended) The computer system of claim 56 [~~or 57~~], wherein the database further comprises sequence information for said at least one nucleic acid sequence.

59. (Amended) The computer system of claim 56 [~~or 57~~], wherein the database further comprises information identifying the expression level for said at least one nucleic acid sequence in at least one normal mast cell.

60. (Amended) A computer system of claim 56 [~~or 57~~], wherein the database further comprises information identifying the expression level of said at least one nucleic acid sequence in at least one mast cell from a patient with allergic hypersensitivity.

62. (Amended) A computer system of claim 56 [~~or 57~~], further comprising records including descriptive information from an external database, which information correlates said genes to records in the external database.

66. (Amended) A method of claim 64[~~or 65~~], wherein the expression level of at least two nucleic acid sequences are compared.